Do RTAs Kill the Trade-Creation Effects of Migration? An analysis of the European Economic Area (EEA) Agreement -- Chidubem Okechi (2017)

Abstract

International trade and migration are two important components of globalization, and they have followed similar trends over the past century. Although governments around the world have had a favorable view of trade, the same cannot be said of migration. There have been numerous studies exploring the linkages between trade and migration, and most findings have shown that the causal effect of migration on trade is well-founded. There could, however, be distortions in these trade-creation effects, one of which occurs when trade agreements are struck. This paper examines this distortion in the case of the European Economic Area (EEA) agreement which came into force in 1994. Using data on bilateral export, immigration and emigration for ten of the pioneering countries between 1980 and 2006, I find that although immigration does have an export-creation effect, the EEA agreement makes immigration export-hindering. This agreement does not, however, seem to have any impact on the export-creation effect of emigration.

1. Introduction

International trade and migration are two important components of globalization. Over the past century, they have followed similar trends, as shown in Figure 1. World trade is currently growing faster than world GDP; a condition which has been consistent since the 90s (World Trade Statistical Review 2016). Migration is no different either. "If all of the world's international migrants (people living in a country that is different from their country or territory of birth) lived in a single country, it would be the world's fifth largest, with around 244 million people" (Connor, 2016). In 1960, the share of migrants to world population was 2.6% but in 2015, that share had increased to 3.3% signifying a 0.7-percentage-point increase (Connor, 2016). This is significant considering that the world population has grown rapidly since then. "Push factors" in home countries and "pull factors" in host countries have been accredited with this development. Some push factors include lack of employment opportunities, conflicts and natural disasters. Some pull factors include social cohesion, good climate, political stability and even a zest for adventure. Trade, likewise, has grown in prominence because of its perceived comparative advantage benefits, specialization benefits, political benefits, increased competition benefits, and factor endowment benefits. These properties of trade and migration have made them subjects of political discussion.

Although governments around the world have had a favorable view of trade, the same cannot be said of migration. In the last decades, governments have kept reducing barriers to trade without proportionally lowering those to immigration (Fagiolo and Mastrorillo, 2014). And this is despite the theoretical and empirical suggestions that migration may be beneficial to both host and home countries in terms of economic development. Rodrik (2002) deduced that the potential gains from free migration may be larger than gains from liberalizing existing trade barriers. It had also been proposed that there may be causal links existing between migration and trade; that migration boosts trade. This relationship, however, may vary with context.

In this paper, I intend to explore the question: How do regional trade agreements (RTAs) impact the trade-creation effect of migration? Do they enhance it? Or do they make it redundant?

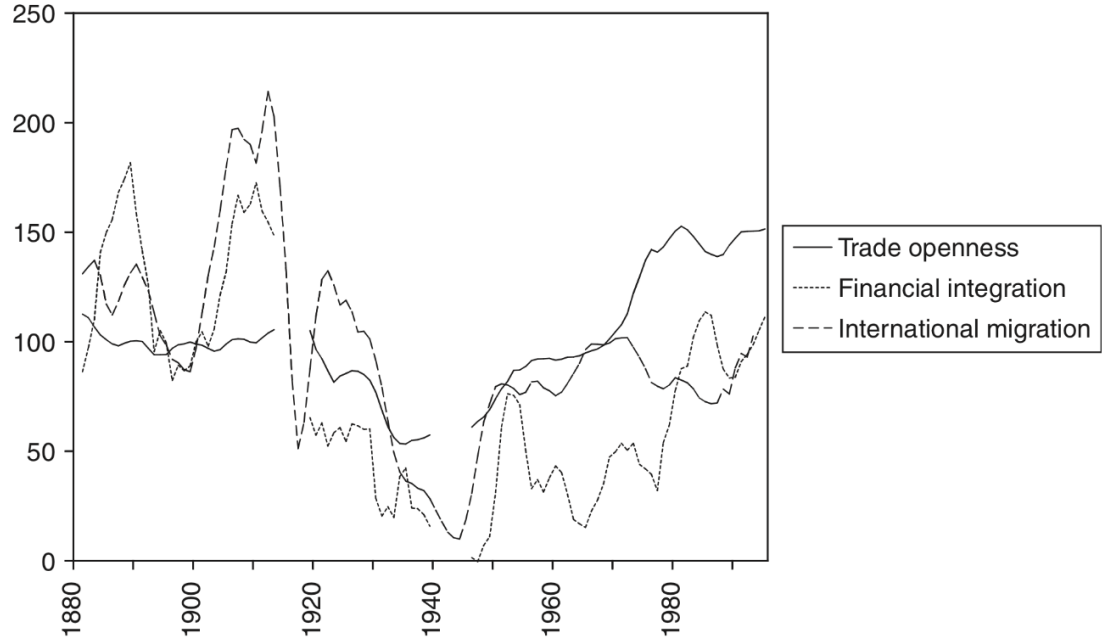

Figure 1. Migration, financial integration and trade openness, 1880-1996 (indexed to 1900 = 100) – Cambridge Economic History Vol. 2 (Source: Ortiz-Ospina and Roser (2016)).

By examining the case of the European Economic Area (EEA) agreement in 1994, I intend to explore this question to understand whether migration is still essential to trade-creation in the presence of regional trade agreements. I use the gravity framework, which has been applied to international bilateral flows since Tinbergen (1962) and Pöyhönen (1963). The paper is structured as follows. Section 2 discusses the different links between international trade and migration, particularly in the context of work in existing literature. Section 3 provides a comprehensive background on the data and choice of data, along with a summary of the salient variables to be used in the analysis. Section 4 presents the methodologies and analytical techniques, culminating in the expression of the empirical model for the research question. Section 5 presents the results of analyses from Section 4. Section 6 briefly discusses the results from Section 5, and further implications. Section 7 concludes the paper, highlighting the main results and points.

2. Literature Review

There have been numerous studies regarding the linkages between trade and migration. They are mainly of two types: the impact of trade on migration, and the impact of migration on trade. More generally, migration officials and researchers focus on the impact of foreign trade policy on migration (Bacarreza and Ehrlich, 2006). However, economists have been more interested in examining the impact of migration on foreign trade flows. In addition to being of more economic interest, the effect of migration on trade is more empirically decipherable than the reverse relationship. Morrison (1982) claims that the effect of foreign trade on migration is "indirect and not necessarily significant" whereas there always seems to be a "robust and positive relationship between migration and bilateral trade flows" (Parson, 2005).

Gould (1994) was one of the foremost contributors on the empirical relationship between migration and trade under the gravity framework. In the paper, he examines the relationship between migration

and trade by using data on U.S. trade from 1970 to 1986. A possible explanation for the links between migration and foreign direct investment (FDI) stem from the idea that immigrants bring a preference for home-country products, which would result in an increase in imports in the host country. Another link is that immigrants may bring about information access on their home-country markets which could possibly reduce transaction costs and facilitate trade. In lieu of these reasons, Gould (1994) examines the determinants of U.S. trade with 47—mostly high-income—countries. He finds that immigration has a positive impact on trade but found that immigration always has a stronger impact on exports than on imports.

In a subsequent study by Girma and Yu (2002), the United Kingdom's trade with 48—mostly high-income—countries from 1981 to 1993 is examined under the same mechanism. They find similar results, thereby signifying the robustness of the trade-creation effect of migration. Jansen and Piermartini (2009) examine, in more detail, one of the known mechanisms through which migration can have an enhancing effect on trade: information access. They do this by studying the impact of temporary immigrants. Temporary migrants are likely to be less integrated into the host country than permanent migrants. At the same time, their knowledge of the home country is likely to be more up to date (Jansen and Piermartini, 2009). The results show that temporary migrants have a role complementary to that of permanent migrants in promoting trade. They find that, on average, temporary migrants have a stronger impact—than permanent migrants—on both exports and imports for the migrant host country.

Time plays an important role in moderating the linkages between migration and international trade (Jansen and Piermartini, 2009). The intuition is that it takes time for the economic forces to align in such a way that necessary business and social networks begin to have effects on bilateral trade. Gould (1994) tests for the importance of immigrants' length of stay on bilateral trade flows and finds that, for imports, immigrant-link effects increase at a decreasing rate over time, whereas for exports, they increase only after several years of stay. Herander and Saavedra (2005) also find that the average length of stay of a migrant in the host area has positive impacts on exports, however this effect diminishes through time. This finding is consistent with the idea that the longer a migrant stays away from home, the weaker the home connection and, hence, the effect of that connection (Jansen and Piermartini, 2009).

Fagiolo and Mastrorillo (2014) go a bit further in their trade-migration analysis. They explore the relationships between international human migration and merchandise trade using a complex-network approach. The evolution of international trade channels and migration pathways have, over the years, led to a complicated web of relationships among countries. Their findings suggest that bilateral trade between any two countries is not only affected by the presence of migrants from either country, but also by their relative embeddedness in the complex web of corridors making up the network of international human migration (Fagiolo and Mastrorillo, 2014).

An often overlooked detail is the variation of the trade-creation effect as the degree of differentiation of trade goods increases. By using the remarkable and uneven increase of immigration to Spanish provinces between 1993 and 2008, Peri and Requena (2010) perform a variety of analyses. Their analyses predict that "the trade-creation effect will be larger in the trade of goods with a higher degree of differentiation than on those with low degree of differentiation." Genc et al. (2011) also analyze the distribution of immigration elasticities of imports and exports across 48 studies that yielded 300 estimates. The results show that immigration encourages trade, but the impact is diminished for trade in homogeneous goods such as raw materials. This is understandable as demand for raw materials is relatively inelastic, and their trade is facilitated at much broader levels than the migrant level.

Another subtle detail that could be revealing is the variation of the trade-creation effect as regional trade agreements are struck. The trade barriers that would otherwise have been partially broken by migration cease to exist as soon as these agreements start. Would migration continue to facilitate trade in the same capacity as it used to in the absence of a trade agreement? Will it facilitate trade more or less? In other words, are regional trade agreements (RTAs) substitutes or complements to migration with regards to trade-creation? This paper examines these questions in the context of the formation of the European Economic Area (EEA) and its pioneer members in 1994.

3. Data Sources and Description

3.1. Choice of countries

The EEA agreement is a trade agreement which came into force on the 1st of January 1994, and was aimed at bringing together the EU member states and the three EEA EFTA states (Iceland, Liechtenstein and Norway) into a single market known as the "Internal Market" (EFTA, 2017). The EEA agreement facilitates the free movement of goods, services, and capital throughout the 31 EEA states. It also encourages cooperation in other common issues such as education, the environment, social policy, tourism and culture, and consumer protection. When the agreement started, there were 17 member states. 13 others joined in subsequent years. The focus of this paper will be on a subset of the 17 pioneering states. This provides a controlled reference point before which there was no EEA agreement, and after which there was one. I choose 10 of these 17 pioneering countries and obtained bilateral trade and migration data for the 190 combination pairs of exporting and importing countries. The 10 countries chosen—based on data availability—are: Belgium (BEL), Germany (DEU), Denmark (DNK), Spain (ESP), Finland (FIN), Great Britain (GBR), Italy (ITA), The Netherlands (NLD), Norway (NOR), and Sweden (SWE). I collected data for these countries at yearly intervals from 1980 to 2006.

3.2. Data sources

Data on bilateral trade and standard controls for the chosen countries were obtained from the gravity dataset made available by CEPII to allow for the replication of Head et al. (2010). For each country, the amount of exports to, and imports from, the other 9 countries were available. There were many standard controls available in this data, but many were inapplicable to the countries of choice. One such inapplicable controls is whether they were colonized. Another is the GATT/WTO indicator. Each of the 10 countries were already members of the GATT/WTO by 1980, hence this variable gives no new information.

The migration data were obtained from the data set compiled by Ortega and Peri (2012). The data was available from 1980 to 2006 covering 15 OECD destination countries, and 120 sending countries. It captures the yearly migration of people who intend to be residents in the receiving countries. Hence the measure does not capture temporal migrants, students and others who travelled for tourism or business-related reasons. They also collected data on time-varying immigration policies that regulate the entry of immigrants in the destination countries. Controlling for these migration policies was considered, however, among the European countries in question, there were barely any other significant changes in migration policy over the same time period.

The final set of variables for the analysis is made up of indicators for other trade agreements within the group of countries, including the trade agreement of interest, *eea.* Mario Larch's Regional Trade Agreement Database from Egger and Larch (2008) was the source of this data. The database includes

all multilateral and bilateral regional trade agreements (RTAs) as notified to the World Trade Organization for the last 66 years from 1950 to 2015. The indicators capturing these agreements turn from 0 to 1 as soon as the two countries are simultaneously members of the trade agreement. Some of these controls, however, were not applicable because they do not change for any of the countries (or country-pairs) throughout my duration of interest. The indicators capturing other trade agreements that do not include the 10 countries were not included in the analysis.

3.3. Data summary

The compiled panel data for my analysis gives information for country-pairs over the 27-year period. In particular, for each possible country-pair, the two countries involved are each represented as the home country (for trade) and as the foreign country at some point within the observations. The trade variable (*trade*) represents the value of exports from the home country to the foreign country. There are two measures of migration in the dataset: *mig_f2h* which is the migration from the foreign country to the home country, and *mig_h2f* which is the migration from the home country to the foreign country. The former is of particular interest because it may give information on the trade-creation effect of inward migration (or immigration); that is, exports benefits of immigration in the home country. Table 1 gives a description of the time-variant and time-invariant variables used in the analysis. Table 2 gives the summary of the non-binary variables.

4. Methodology

The theoretical framework is based on the gravity framework. Its fundamental premise is that trade flows between two countries is mostly explained by the size of the economies of the two countries and the costs of trade between the two countries. In this analysis, I include migration between the two countries as a determinant of trade as well. To estimate the change in the trade-creation effect of migration as a result of the EEA agreement of 1994, I include an interaction between migration and the EEA indicator. The coefficient of this interaction is thus the main coefficient of interest.

By including variables like the GDP of both countries and their populations, the sizes of the economies are controlled for. Also, by including variables like the distance between the countries, the land areas of the countries and some indicators on language and currency, I control for the trade costs. Time-lagged migration could also be included in the regression because the migrants in previous years could still be involved in activities that foster trade in the current year. However, the test for the significance of the lagged migration showed that it is only significant at a very low confidence. This is particularly interesting as it may suggest that benefits of migration to trade are mostly contemporaneous and diminish quickly with time.

The three basic equations that describe the main specifications of the model are as follows:

(1)

$$\log(trade_{hf}^{t}) = \beta_0 + \beta_1 \log(migration_{fh}^{t}) + \beta_2 EEA + \beta_3 \log(migration_{fh}^{t}) * \text{EEA} + \mathbf{BX} + \varepsilon_{hf}^{t}$$

(2)

$$\log(trade_{hf}^{t}) = \beta_0 + \beta_1 \log(migration_{hf}^{t}) + \beta_2 EEA + \beta_3 \log(migration_{hf}^{t}) * \text{EEA} + \mathbf{BX} + \varepsilon_{hf}^{t}$$

(3)

$$\log(trade_{hf}^{t}) = \beta_0 + \beta_1 \log(migration_{fh}^{t}) + \beta_2 \log(migration_{hf}^{t}) + \beta_3 EEA + \beta_4 \log(migration_{fh}^{t}) * EEA + \beta_5 \log(migration_{hf}^{t}) * \text{EEA} + \mathbf{BX} + \varepsilon_{hf}^{t}$$

Where

$trade_{hf}^{t}$ is the value of exports from home country to foreign country at year t;

$migration_{fh}^{t}$ is the number of migrants from foreign country to home country at year t;

$migration_{hf}^{t}$ is the number of migrants from home country to foreign country at year t;

EEA is the indicator which takes the value of 1 when both countries are EEA members;

X is a vector of gravity controls commonly found in literature, and **B** is a vector of their coefficients. Table 3 summarizes the controls that make up **X.** Note that the model is based on the perspective of the home country.

For my first specification, I examine migration's trade-creating effect as it is commonly known; immigration's impact on exports from the home country. The variable used is *lmig_f2h*, which is also interacted with *eea* to give the *lmigf2h_eea*. However, I also hope to explore emigration's impact on exports from home country. In this case the variable used is *lmig_h2f*, which is also interacted with *eea* to give the *lmigh2f_eea*. The specification of greatest interest is Equation 3 as will be discussed.

To avoid the "Silver Medal Error" as pointed out by Baldwin and Taglioni (2007), I used unidirectional trade flows as well as unidirectional migrant flows, instead of the sum or the average of both flows. Theory stipulates that gravity equations (or frameworks) explain unidirectional trade flows and could explain averaged trade flows. The common mistake, however, arises when one uses arithmetically averaged trade flows instead of geometrically averaged trade flows. This error in calculation is referred to as the "Silver Medal Error."

I avoid the "Bronze Medal Error" (Baldwin and Taglioni, 2007) in controlling for any inflationary biases by including year dummies. To deflate nominal trade volumes, a common mistake is to divide by the U.S. price index for that year. However, this introduces spurious correlation in the results; a phenomenon in which two independent variables become deceptively correlated when they are divided by a common trend. Including the year dummies account for inflation trends but does not introduce spurious correlation.

I also acknowledge that the model has not controlled—and cannot control—for all bilateral elements of trade costs due to lack of perfect data. Hence, the error term contains multilateral resistance terms, which are functions of the bilateral trade costs included in the model, and are correlated with them. This correlation leads to a bias in the estimated coefficients called the "Gold Medal Error" (Baldwin and Taglioni, 2007). To correct for this, I include country-pair dummies to capture the variation in trade flows that differ by country-pairs but are approximately constant over time.

Heteroscedasticity could also cause problems in the interpretation of the coefficients. Heteroscedasticity is when the variance of the error term changes with observations. The consequence is that the standard errors will most likely be underestimated thereby causing the coefficients to be more statistically significant than they actually are. I account for this problem by constructing clustered standard errors by country-pairs.

5. Results

Table 4 presents the estimates of Equation 1 in which the home country is the exporter, but is the destination country for migrants. For both Tables 4, 5 and 6, column 1 shows the results for the basic OLS regression, column 2 shows the results for the regression with year dummies, while column 3 shows the results for the regression with year dummies and country-pair fixed effects. For interpretation, results on column 3 are considered because they are of greater credibility. The coefficients on the first five variables are robust across the three models. The positive and statistically significant coefficients on *lmig_f2h* show the export-enhancing effect of immigration for the home country. A 10% growth in bilateral immigration would result in a 0.6% growth in corresponding bilateral exports. The positive and statistically significant coefficients on *eea* suggest that, for the select sample of countries, trade increased by about 101% due to the EEA agreement. The negative and statistically significant coefficients on *lmigf2h_eea* indicate that after the EEA agreement, the export-creation effect of bilateral immigration in these countries decreased by 0.75% (for every 10% increase in immigration). In fact, it seems to suggest that immigration has had a trade-hindering effect since the EEA agreement such that a 10% increase in bilateral immigration results in a 0.14% decrease in corresponding bilateral exports.

Table 5 presents the estimates for Equation 2 in which the home country is the exporter but is now the origin country for migrants. Again, the coefficient on *lmig_h2f* suggests that a 10% increase bilateral emigration will boost bilateral exports by 0.8%. Interestingly, this model specification does not seem to accredit the EEA agreement with any export increases. However, its results also indicate that the EEA agreement results in a decrease in the trade-creation effect of emigration.

The problem with the first two specifications is that they fail to control for the opposite migrant flow. Hence, the results are based on the assumption that there is only one direction of trade flow. Equation 3, however, solves this problem because it accounts for both migrant flow directions. The positive and statistically significant coefficient on *lmig_f2h* (from Table 6) indicates that a 10% rise in bilateral immigration results in a 0.42% rise in the corresponding bilateral exports, given the presence of corresponding emigration as well. The coefficient on *lmig_h2f* suggests that a 10% rise in bilateral emigration would result in a 0.6% rise in corresponding bilateral exports. Likewise, the EEA agreement seems to have had a significant effect on trade growth (about 139% increase in trade).

The coefficient on *lmigf2h_eea* indicates a decrease in the export-creation effect of immigration by 0.46% for a 10% increase in immigration. That is, after the EEA agreement, a 10% increase in immigration resulted in a 0.034% decrease in corresponding bilateral exports. As for emigration, the coefficient on *lmigh2f_eea* suggests that its export-creation effect was not influenced by the EEA agreement. The coefficients involved, though negative, are not statistically significant.

Other relationships are also worth considering. The population of the foreign country seems to be a major driver of exports from the home country. More striking, however, are the coefficients on *eu* and *eftagm* which suggest that the EU and EFTA have not necessarily been catalysts for trade between bilateral pairs, for the select sample of countries. This could be the subject of future exploration.

6. Interpretation

The above results suggest that migration and trade are complementary. Immigration and emigration between two countries helps in boosting their exports. This finding is consistent with the common results in literature, with sound theoretical and intuitive backings. The main phenomenon of interest however is the effect of trade agreements, such as the EEA agreement, on this complementary behavior. The results from the model presented in this paper show that trade agreements, which have trade-creation effects of their own, tend to decrease the trade-creation effect of migration. In fact, they tend to decrease the export-creation effect of immigration up to the point that they reverse this effect to become export-hindering. The robustness of this finding would, of course, be dependent on the results from the examination of other trade agreements.

It makes sense that if migrant presence in the home country is no longer needed to enhance trade, the avenues through which those migrants enhance home country exports are rendered redundant. For example, businesses in the migrant destination country (having now been extensively exposed to goods from the foreign country due to the trade agreement) gain significant familiarity in order to meet the demand for the migrant country's goods. This would reduce the incentive for immigrants to engage in import-creating activities. Likewise, businesses in the migrant home country would gain enough familiarity to meet the demand for the migrant destination country's goods therefore reducing the incentive for immigrants to engage in export-creating activities. Migration is good for trade, but there may be an optimal level of migration. Therefore, RTAs seem to lower the optimal level of migration for trade-creation.

Although empirical evidence points to a pro-trade immigrant effect, there are issues with the econometric methods. One of such problems is the direction of causality between trade and migration. The use of instrumental variable and lagged variables are common remedies to this problem. In my analysis, I refrain from using lagged variables because they turned out to be insignificant to the model.

The impact of migrants of different skillsets could be a potential topic for further exploration. Although all forms of migration are expected to be trade-creating up to some point, skill-level could modify this effect. Examining the impact of migrant stock already present in a country may also be insightful. On the one hand, the discovery that migration's effects on trade diminishes quickly with time may suggest that the stock of migrants within a country would produce only marginal effects on trade. On the other hand, the rate of assimilation within the destination country due to the level of migrant stock could have a significant effect on trade.

7. Conclusion

In this paper, the trade-creation effect of migration is studied in the context of regional trade agreements (RTAs). A preliminary result suggests that benefits of migration to trade are mostly contemporaneous and diminishes quickly with time. The main results show that although immigration results in an increase in corresponding bilateral exports, the effect quickly disintegrates in the presence of the RTA, EEA. There does not seem to be an impact on the export-creation effect of emigration. Other results show that the EU and EFTA have not been integral in fostering bilateral trade among the select sample of countries.

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Appendix

Table 1. Time-variant and time-invariant variables.

Variable	Description
home	Name of home country
homecode	ISO3 code for home country
foreign	Name of foreign country
foreigncode	ISO3 code for foreign country
trade	Value of exports from home to foreign
mig_f2h	Migration from foreign to home
mig_h2f	Migration from home to foreign
eea	=1 if home and foreign are members of EEA
distw	Population-weighted distance between the two countries (km)
pop_h	Population of home, total in mn
gdp_h	GDP of home (current mn US$)
area_h	Area in sq. kms of home
pop_f	Population of foreign, total in mn
gdp_f	GDP of foreign (current mn US$)
area_f	Area in sq. kms of foreign
tdiff	Number of hours difference between home and foreign
heg_h	=1 if home is current or former hegemon of foreign
contig	=1 for contiguity (the two counties share a border)
comlang_off	=1 for common official primary language
comlang_ethno	=1 if a language is spoken by at least 9% of the population in both countries
comcur	=1 for common currency
rta	=1 for regional trade agreement in force
eu	=1 if home and foreign are members of the EU
eftagm	=1 if home and foreign are members of EFTA

Table 2. Summary of non-binary variables.

Variables	(1) N	(2) Mean	(3) SD	(4) Min	(5) Max
trade	2,248	6,682	10,320	74.08	108,183
distw	2,430	1,206	628.8	160.9	3,027
pop_h	2,430	28.37	26.64	4.091	82.54
gdp_h	2,430	560,223	622,891	50,108	2.907e+06
area_h	2,430	263,709	162,488	33,114	505,954
pop_f	2,430	28.37	26.64	4.091	82.54
gdp_f	2,430	560,223	622,891	50,108	2.907e+06
area_f	2,430	263,709	162,488	33,114	505,954
tdiff	2,430	0.478	0.516	0	2
mig_h2f	2,037	2,618	5,778	5	88,865
mig_f2h	2,037	2,618	5,778	5	88,865

Table 3. List and description of variables in **X**.

Variable	Description
ldistw	Log of population-weighted distance between the two countries (km)
lpop_h	Log of population of home, total in mn
lgdp_h	Log of GDP of home (current mn US$)
area_h	Area in sq. kms of home
lpop_f	Log of population of foreign, total in mn
lgdp_f	Log of GDP of foreign (current mn US$)
area_f	Area in sq. kms of foreign
tdiff	Number of hours difference between home and foreign
heg_h	=1 if home is current or former hegemon of foreign
contig	=1 for contiguity (the two counties share a border)
comlang_off	=1 for common official primary language
comlang_ethno	=1 if a language is spoken by at least 9% of the population in both countries
comcur	=1 for common currency
rta	=1 for regional trade agreement in force
eu	=1 if home and foreign are members of the EU
eftagm	=1 if home and foreign are members of EFTA

Table 4. Results for specification with *lmig_f2h* (migration from foreign country to home country)

Independent Variables	(1) ltrade	(2) ltrade	(3) ltrade
lmig_f2h	0.0642***	0.0576***	0.0607***
	(0.0156)	(0.0163)	(0.0178)
eea	0.531***	0.600**	0.698**
	(0.0993)	(0.275)	(0.291)
lmigf2h_eea	-0.0681***	-0.0697***	-0.0750***
	(0.0143)	(0.0144)	(0.0149)
lgdp_h	0.355***	0.371***	0.334***
	(0.0781)	(0.102)	(0.111)
lgdp_f	0.663***	0.748***	0.698***
	(0.0724)	(0.134)	(0.133)
ldistw	-1.430***	-1.436***	-
	(0.0986)	(0.0996)	
pop_h	0.00835**	0.00688*	-0.000337
	(0.00325)	(0.00394)	(0.0230)
pop_f	0.00236	-0.000864	0.0375
	(0.00273)	(0.00464)	(0.0304)
area_h	7.96e-07**	8.75e-07**	-
	(3.52e-07)	(3.43e-07)	
area_f	7.44e-07**	8.25e-07***	-
	(3.10e-07)	(3.02e-07)	
tdiff	0.0979	0.108	-
	(0.0806)	(0.0825)	
contig	-0.239*	-0.231*	-
	(0.129)	(0.128)	
comlang_off	0.191	0.134	-
	(0.143)	(0.140)	
comlang_ethno	-0.0927	-0.00872	-
	(0.196)	(0.197)	
comcur	0.233***	0.203***	0.192***
	(0.0335)	(0.0446)	(0.0421)
heg_h	0.147	0.187**	-
	(0.102)	(0.0951)	
rta	0.156**	0.234***	0.234***
	(0.0686)	(0.0759)	(0.0770)
eu	0.0740	0.0715	0.0608
	(0.0517)	(0.0547)	(0.0554)
eftagm	-0.0302	-0.00995	-0.0309
	(0.0568)	(0.0586)	(0.0600)
Constant	3.615***	2.481	-6.849***
	(0.727)	(2.293)	(2.506)
Observations	1,875	1,875	1,875
R-squared			0.891

Clustered standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

(1) Basic regression; (2) With year dummies; (3) With year dummies and country-pair fixed effects

Table 5. Results for specification with *lmig_h2f* (migration from home country to foreign country)

Independent Variables	(1) ltrade	(2) ltrade	(3) ltrade
lmig_h2f	0.0987***	0.0931***	0.0805***
	(0.0194)	(0.0189)	(0.0206)
eea	0.228**	0.132	0.205
	(0.0942)	(0.249)	(0.273)
lmigh2f_eea	-0.0201	-0.0207	-0.0242*
	(0.0127)	(0.0130)	(0.0127)
lgdp_h	0.379***	0.489***	0.464***
	(0.0652)	(0.0889)	(0.0919)
lgdp_f	0.544***	0.601***	0.517***
	(0.0712)	(0.114)	(0.116)
ldistw	-1.345***	-1.348***	-
	(0.101)	(0.0999)	
pop_h	0.00569**	0.00169	-0.00586
	(0.00290)	(0.00365)	(0.0258)
pop_f	0.00659**	0.00365	0.0675***
	(0.00276)	(0.00413)	(0.0251)
area_h	6.73e-07*	7.50e-07**	-
	(3.53e-07)	(3.36e-07)	
area_f	5.55e-07*	6.43e-07**	-
	(3.24e-07)	(3.14e-07)	
tdiff	0.153*	0.170**	-
	(0.0807)	(0.0817)	
contig	-0.292**	-0.272**	-
	(0.134)	(0.127)	
comlang_off	0.161	0.136	-
	(0.138)	(0.129)	
comlang_ethno	0.00108	0.0348	-
	(0.190)	(0.187)	
comcur	0.173***	0.163***	0.137***
	(0.0375)	(0.0475)	(0.0438)
heg_h	0.0386	0.00781	-
	(0.0959)	(0.0916)	
rta	0.159***	0.235***	0.225***
	(0.0610)	(0.0718)	(0.0724)
eu	0.141**	0.123**	0.108*
	(0.0567)	(0.0595)	(0.0579)
eftagm	0.0871	0.0748	0.0418
	(0.0668)	(0.0650)	(0.0644)
Constant	3.968***	2.113	-6.781***
	(0.798)	(1.952)	(2.224)
Observations	1,875	1,875	1,875
R-squared			0.894

Clustered standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

(1) Basic regression; (2) With year dummies; (3) With year dummies and country-pair fixed effects

Table 6. Results for specification with both *lmig_f2h* and *lmig_h2f*

Independent Variables	(1) ltrade	(2) ltrade	(3) ltrade
lmig_f2h	0.0464***	0.0429***	0.0424**
	(0.0162)	(0.0155)	(0.0185)
lmig_h2f	0.0820***	0.0785***	0.0596***
	(0.0227)	(0.0208)	(0.0208)
eea	0.426***	0.717**	0.873***
	(0.106)	(0.310)	(0.330)
lmigf2h_eea	-0.0337***	-0.0361***	-0.0458***
	(0.0105)	(0.0103)	(0.0107)
lmigh2f_eea	-0.0163	-0.0187	-0.0202
	(0.0142)	(0.0141)	(0.0139)
lgdp_h	0.343***	0.324***	0.244**
	(0.0791)	(0.107)	(0.109)
lgdp_f	0.621***	0.597***	0.494***
	(0.0818)	(0.135)	(0.136)
ldistw	-1.339***	-1.356***	-
	(0.0985)	(0.100)	
pop_h	0.00741**	0.00768*	0.0220
	(0.00324)	(0.00418)	(0.0241)
pop_f	0.00331	0.00377	0.0898***
	(0.00310)	(0.00491)	(0.0322)
area_h	6.46e-07*	7.02e-07**	-
	(3.57e-07)	(3.55e-07)	
area_f	6.04e-07*	6.53e-07**	-
	(3.22e-07)	(3.23e-07)	
tdiff	0.149*	0.147*	-
	(0.0807)	(0.0839)	
contig	-0.276**	-0.284**	-
	(0.131)	(0.134)	
comlang_off	0.112	0.105	-
	(0.139)	(0.142)	
comlang_ethno	0.0260	0.0637	-
	(0.178)	(0.181)	
comcur	0.178***	0.164***	0.129***
	(0.0371)	(0.0467)	(0.0397)
heg_h	0.117	0.114	-
	(0.112)	(0.105)	
rta	0.151**	0.234***	0.206**
	(0.0722)	(0.0852)	(0.0863)
eu	0.0957*	0.0830	0.0651
	(0.0560)	(0.0601)	(0.0587)
eftagm	0.00452	0.0136	-0.0257
	(0.0580)	(0.0596)	(0.0608)
Constant	3.286***	3.850*	-5.368**
	(0.830)	(2.322)	(2.626)
Observations	1,544	1,544	1,544
R-squared			0.887

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

(1) Basic regression; (2) With year dummies; (3) With year dummies & country-pair fixed effects